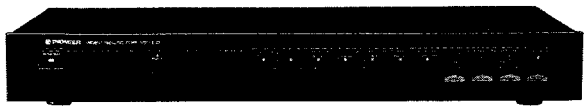
Operating Instructions

AUDIO/VIDEO SELECTOR

VS-60



Thank you for buying this Pioneer product.
Please read through these operating instructions and then you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In accordance with the power and voltage requirements of differing areas, the following model names are used to designate models with differing electrical specifications.

KU, KC	AC 120 volts
S, S/G, SS	AC 110, 120, 220, 240 volts (Switchable voltage)

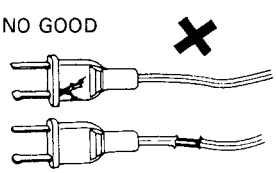
NOTES:

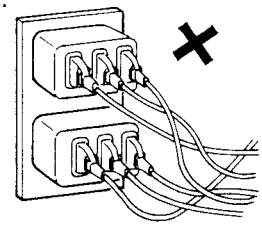
- *The model names are stamped on the packing case.*
- *These operating instructions are prepared on the basis of the KU model, and they can be used for other models. Although the design of the power plug and the power outlet shown may differ from the actual one, the operating procedures are the same.*

POWER SUPPLY CORD

- This audio/video selector is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- When the power cord or plug is damaged or frayed, unplug this audio/video selector from the wall outlet and refer servicing to qualified service personnel.
- Do not overload wall outlets and extension cords as this can result in fire or electric shock.

• NO GOOD





WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

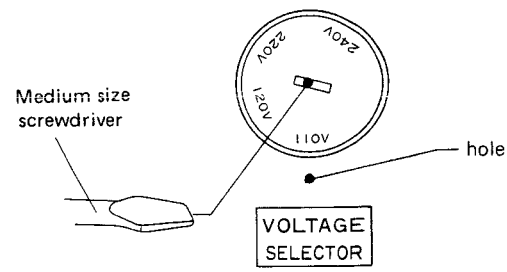
IMPORTANT NOTICE

[For U.S.A. and Canadian models]
The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep in a secure area. This is for your security.

LINE VOLTAGE SELECTOR SWITCH

The line voltage selector switch is located on the bottom of the cabinet of this audio/video selector. Before your VS-60 is shipped from the factory, the switch is set to the power requirements of the VS-60's destination. Check that it is set properly before plugging the power cord into the outlet. If the voltage is not properly set or if you move to an area where the voltage requirements differ, adjust the selector switch as follows:

- Provide yourself with a medium-sized screwdriver. Insert the tip of the screwdriver into the groove of the selector switch and turn it so that the power voltage marking of your area points to the Hole.



[For Canadian model]

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION: POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

IMPORTANT

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

PIONEER®

SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the appliance is operated.

RETAIN INSTRUCTIONS — The safety and operating instructions should be retained for future reference.

HEED WARNINGS — All warnings on the appliance and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

CLEANING — Unplug this video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

ATTACHMENTS — Do not use attachments not recommended by the video product manufacturer as they may cause hazards.

WATER AND MOISTURE — Do not use this video product near water — for example, near a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.

ACCESSORIES — Do not place this video product on an unstable cart, stand, tripod, bracket, or table. The video product may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the video product. Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

VENTILATION — Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the video product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the video product on a bed, sofa, rug, or other similar surface. This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

POWER SOURCES — This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For video products intended to operate from battery power, or other sources, refer to the operating instructions.

POLARIZATION — This video product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact you electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

POWER-CORD PROTECTION
Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

LIGHTNING — For added protection for this video product receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power-line surges.

POWER LINES — An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

OVERLOADING — Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.

OBJECT AND LIQUID ENTRY — Never push objects of any kind into this video product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.

SERVICING — Do not attempt to service this video product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DAMAGE REQUIRING SERVICE
Unplug this video product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
a. When the power-supply cord or plug is damaged.
b. If liquid has been spilled, or objects have fallen into the video product.
c. If the video product has been exposed to rain or water.
d. If the video product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
e. If the video product has been dropped or the cabinet has been damaged.
f. When the video product exhibits a distinct change in performance — this indicates a need for service.

REPLACEMENT PARTS — When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or having the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

SAFETY CHECK — Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine that the video product is in proper operating condition.

OUTDOOR ANTENNA GROUNDING — If an outside antenna is connected to the antenna terminal, be sure the antenna system is grounded so as to provide some protection against voltage surges and build up static charges.
In the U.S.A. section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
See Fig. A.

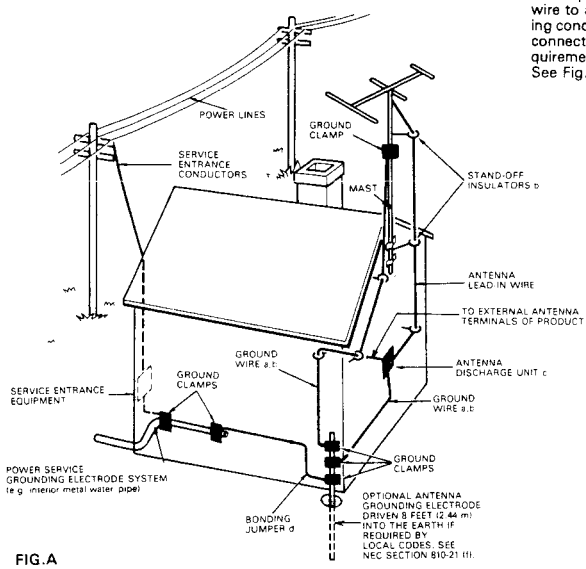

POWER LINES
GROUND CLAMP
SERVICE ENTRANCE CONDUCTORS
MAST
STAND-OFF INSULATORS b
ANTENNA LEAD-IN WIRE
TO EXTERNAL ANTENNA TERMINALS OF PRODUCT
GROUND WIRE a,b
ANTENNA DISCHARGE UNIT c
GROUND CLAMPS
SERVICE ENTRANCE EQUIPMENT
GROUND WIRE a,b
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (e.g. interior metal water pipe)
BONDING JUMPER d
OPTIONAL ANTENNA GROUNDING ELECTRODE DRIVEN 8 FEET (2.44 m) INTO THE EARTH IF REQUIRED BY LOCAL CODES. SEE NEC SECTION 810-21 (f).

FIG.A

a) Use No. 10 AWG (5.3 mm²) copper wire, No. 8 AWG (8.4 mm²) aluminum wire, No. 17 AWG (1.0 mm²) copper-clad steel wire, bronze wire or larger wire as ground wire.
b) Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4 feet (1.22 meters) to 6 feet (1.83 meters) apart.
c) Mount antenna discharge unit as closely as possible to where lead-in enters house.
d) Use jumper wire not smaller than No.6 AWG (13.3 mm²) copper or equivalent when separete antenna-grounding electrode is used.

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APPLICATIONS

FULL COMPLEMENT OF INPUT TERMINALS:

- The VS-60 is equipped with 4 full sets of input terminals, (VIDEO DISC, CATV/AUX, VCR 1, VCR 2) including 2 playback-only terminals for connecting a video disc player, cable television (CATV), or personal computer, and two input terminals for connecting video components with recording functions (e.g. VCR).
- An AUDIO input terminal is furnished for Hi-Fi recording onto VCR.

VIDEO OUTPUT TERMINAL FOR CONNECTION TO MONITOR TV:

- Allows connection to a monitor TV with video input terminals.

RF OUTPUT TERMINAL FOR CONNECTION TO A NORMAL TELEVISION SET:

- For television sets without a video input terminal, an RF(VHF) output terminal is also provided.

RECORDING SELECTOR ALLOWS EASY VIDEO COPYING AND HI-FI RECORDING ON VCR:

- Combined copying with VCR 1 and VCR 2 (1 ► 2, 2 ► 1), copying from video disc or CATV/AUX to VCR 1 or 2, or simultaneous recording onto 2 separate VCRs can be selected with one touch, without interrupting the program source you are presently enjoying.
- By selecting the recording selector's AUDIO position, Hi-Fi recording of sound signals from the audio inputs to VCR is possible. (Applicable only to those VCRs capable of Hi-Fi recording.)

Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that "the ground cable shall be connected to the grounding system of the building, as close to the point of cable entry as practical."

HIGH-PERFORMANCE DESIGN FOR A NEW AGE IN HI-FI VIDEO:

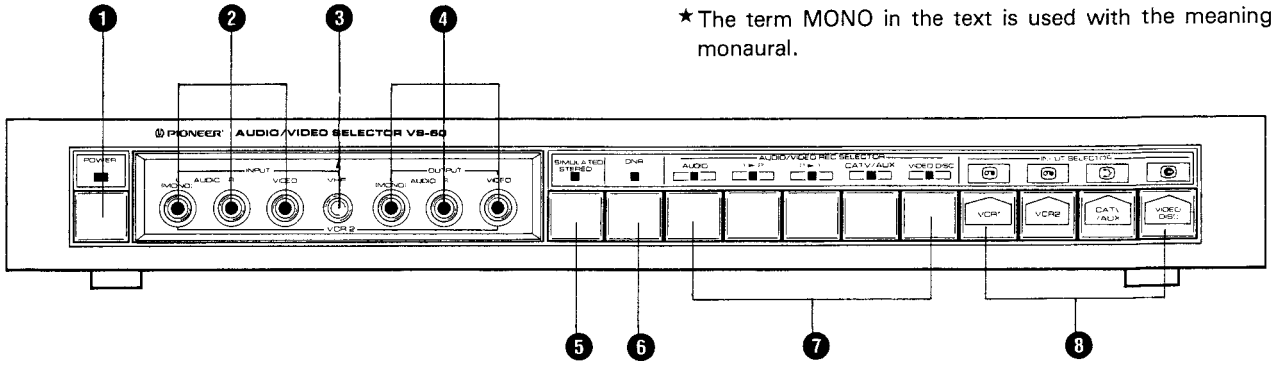
- Incorporates a high-performance video amplifier for optimum performance in this new age of high-resolution video reproduction.
  Frequency response: 5 Hz ~ 10 MHz.
  Video S/N: 55 dB (monitor output).
- Crosstalk within RF terminal: 60 dB (54 MHz ~ 216 MHz)

EQUIPPED WITH LUXURIOUS AUXILIARY FUNCTIONS:

- The built-in SIMULATED STEREO function allows playback of monaural VCR with simulated stereo effect, giving an added fullness to the sound.
- A DNR★ (Dynamic Noise Reduction) circuit is provided to prevent tape hiss noise during VCR playback.
- The VCR 1, 2 audio input and output terminals are furnished with a MONO/STEREO selector switch. As a result, monaural VCR can be played back as is, without necessitating a special cord.

★• *"The DNR Dynamic Noise Reduction System is authorized for use by National Semiconductor Corporation."*
• *"DNR is a trademark of National Semiconductor Corporation."*

FRONT PANEL FACILITIES



★The term MONO in the text is used with the meaning of monaural.

❶ POWER switch/POWER indicator

When this switch is depressed, the power indicator lights red, and power is supplied to the unit. To turn power off, press once again.

❷ VCR 2 INPUT terminals (AUDIO/VIDEO-L (MONO), R)

A VCR with multichannel television sound may be connected. When a monaural audio source is connected, connect the pin plug to the L (MONO) terminal only. A switch built into the terminal will switch the unit to monaural.

❸ VCR 2 VHF INPUT terminal

To input a VCR output signal from an RF (VHF) output terminal, connect to this input terminal using an F-type plug (sold separately). This can be used in the same way as the rear panel VHF IN (VCR 1). The input RF signal can be watched on a normal television set connected through the VHF output terminal.

❹ VCR 2 OUTPUT terminals (AUDIO/VIDEO-L (MONO), R)

These terminals constantly output the video and audio signals of the source presently being viewed. When recording with a second VCR (portable video, etc.), a pin cord is used to connect these output terminals to the VCR's input terminals. Also, when a VCR is connected to the rear panel VCR 1 IN terminals, the playback is output through the VCR 2 OUTPUT terminals, thus allowing video copying. When using a monaural source, connect the pin cord to the L (left) audio input terminal only. A switch built into the terminal automatically switches the unit to monaural.

❺ SIMULATED STEREO switch

This switch allows normal monaural signals to be heard in simulated stereo sound. Use it, for example, when you wish to listen to a monaural VCR with the full sound normally characteristic of stereo.

NOTE:
If this function is used during normal stereo playback, an unnatural stereo effect may be produced.

❻ DNR★ switch (Dynamic Noise Reduction)

The DNR function reduces easily heard high-range noise components.
During video playback, if you notice high-range hissing noise, press this switch to produce easier listening.

NOTE:
- *This switch functions with the source selected with the input selector, and affects the audio output. It is unrelated to the video/audio recording selector.*
- *The degree of high frequency noise reduction depends on the kind of tape used, the recording level, and other conditions.*

❼ AUDIO/VIDEO REC SELECTOR

This selector allows you to select the video component source input to and output from this unit when recording. The video (or audio) are output simultaneously from the VCR 1 and VCR 2 output terminals. However, a special circuit is provided so that during 1 ∼2 recording, no signal is output to 1, and during 2 ∼ 1 recording, no signal is output to 2.

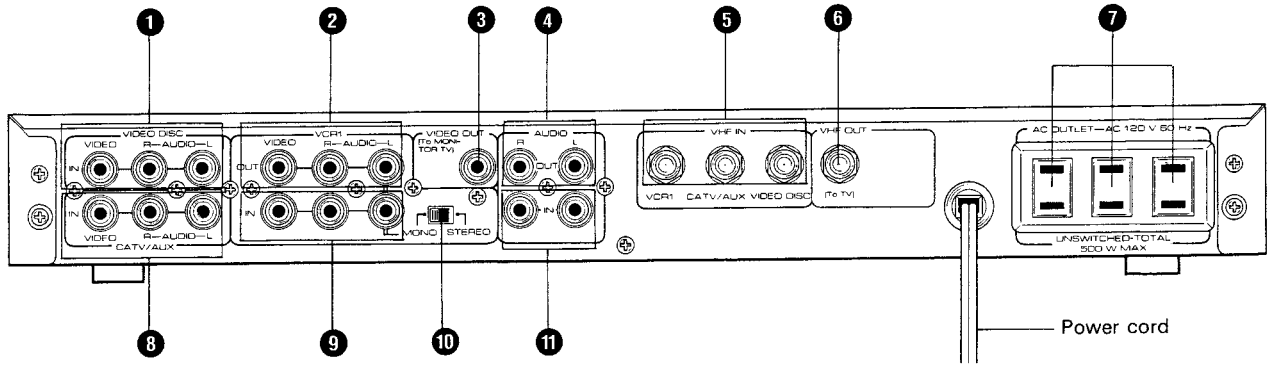
AUDIO:	To record audio signals input to the audio input terminals (L,R) on a Hi-Fi VCR.
1 ► 2:	To record VCR 1 playback signals on VCR 2.
2 ► 1:	To record VCR 2 playback signals on VCR 1.
CATV/AUX:	To record from a video component such as a personal computer's character data or CATV broadcast.
VIDEO DISC:	To record from a video disc player.

❽ INPUT SELECTORS

These selectors are used to choose the various video input components connected to the unit.

Recordings from television programs, records or other materials may be made for your personal entertainment only; other uses may constitute infringement of copyright laws

REAR PANEL FACILITIES



❶ VIDEO DISC IN terminals (VIDEO/AUDIO-L, R)

Use for connecting a video disc player.

❷ VCR 1 OUT terminals (VIDEO/AUDIO-L, R)

The video and audio signals from the source presently being viewed are output constantly from these terminals. Use a pin cord to connect to the input terminals of a VCR with multichannel television sound. When connecting a VCR to the front panel VCR 2 INPUT terminals, the playback is output at the VCR 1 OUT terminals, thus allowing video copying. When the audio channel is monaural, see item ❿ regarding the MONO/STEREO selector switch.

❸ VIDEO OUT terminal (To MONITOR TV)

The video signals from the video components connected to the input terminals are output here in accordance with the INPUT SELECTORS. Connect to the video input terminal of a monitor television.

❹ AUDIO OUT terminals (L, R)

Audio signals from the various video components connected to the input terminals are output here. Connect to your stereo amplifier's TAPE PLAY (INPUT) terminals. Also, when used in combination with the Pioneer Component Display (e.g. SD-25), these terminals may be connected to the audio input terminals on the rear of the display.

❺ VHF IN terminals (VCR 1, CATV/AUX, VIDEO DISC)

When you wish to use a normal television set to watch programs from a video component, connect these terminals to the RF converter output (Ch3 or Ch4) of the various components.

VCR 1:	Connect to the RF output of VCR 1.
CATV/AUX:	Connect to RF output of a CATV terminal converter or other video component.
VIDEO DISC:	Connect to RF output of video disc player.

❻ VHF OUT terminal (To TV)

When you wish to use a normal television set to watch programs from a video component, in addition to connecting the various video components' RF ouptut to the VHF input terminals, connect this terminal to the television's VHF antenna terminal.

When the unit's power is OFF, the RF output signal of the component connected to the VHF input terminal VCR 1 is input directly to the television (regardless of the INPUT SELECTOR setting). Accordingly, VCR 1 can be used even when the power to the VS-60 is turned OFF, and your television set can also be used normally.

❼ AC OUTLET – AC 120 V 60 Hz (UNSWITCHED – TOTAL 500 W MAX)

These outlets may be used to connect the power plugs of your video components. The combined consumption of the connected components should not exceed 500 W.

❽ CATV/AUX IN terminals

Use to connect a cable television converter or other video component.

❾ VCR 1 IN terminals (AUDIO/VIDEO-L, R)

Use to connect a VCR with multichannel television sound.

❿ MONO/STEREO selector switch

When connecting a VCR with monaural audio output, use a single pin cord connected to the VCR 1 AUDIO L channel, and set the audio selector switch to the MONO position. Normally, leave in the STEREO position.

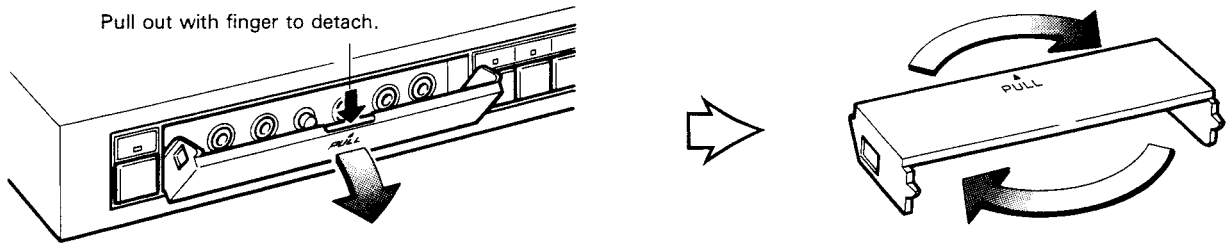
⓫ AUDIO IN terminals (L, R)

Normally, connect to the TAPE REC (OUTPUT) terminals of your stereo amplifier. The audio output of other components (e.g. compact disc player) may also be connected here.

FRONT PANEL TERMINAL COVER

TO REMOVE THE COVER:

- **The cover is designed to be detached.**



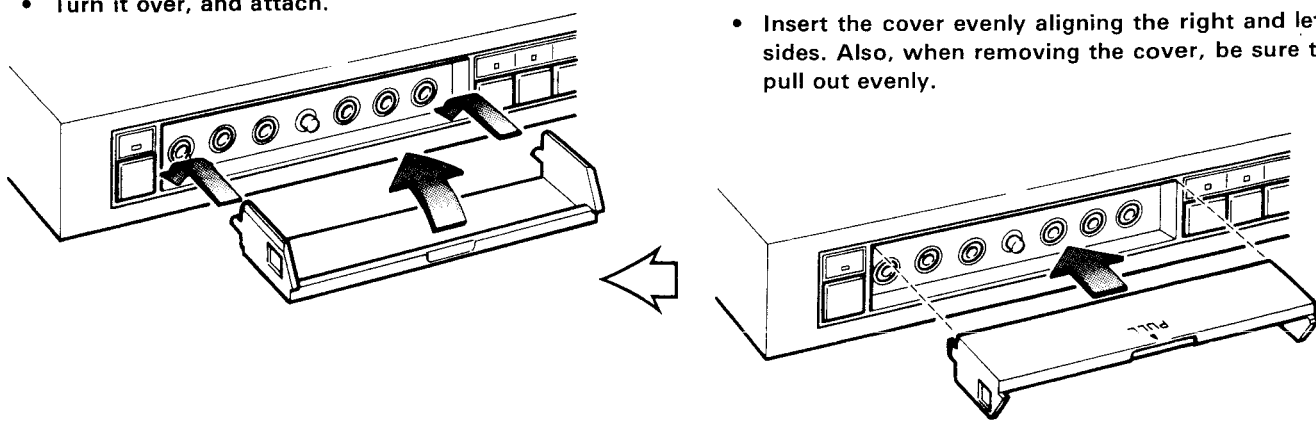
- **By reversing the direction of the cover, it can be stored as shown in the figure below.**

TO ATTACH THE COVER:

- **Pull out the cover.**
- **Turn it over, and attach.**

STORING THE COVER:

- **Insert the cover evenly aligning the right and left sides. Also, when removing the cover, be sure to pull out evenly.**



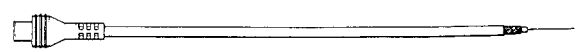
CONNECTION CORDS

VIDEO-AUDIO CORD Available commercially, or provided with other video equipment.

VIDEO CORD Available commercially, or provided with other video equipment.

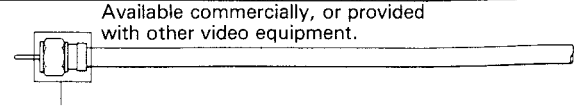
ACCESSORY AUDIO CORD

ACCESSORY COAXIAL CABLE WITH J-TYPE PLUG

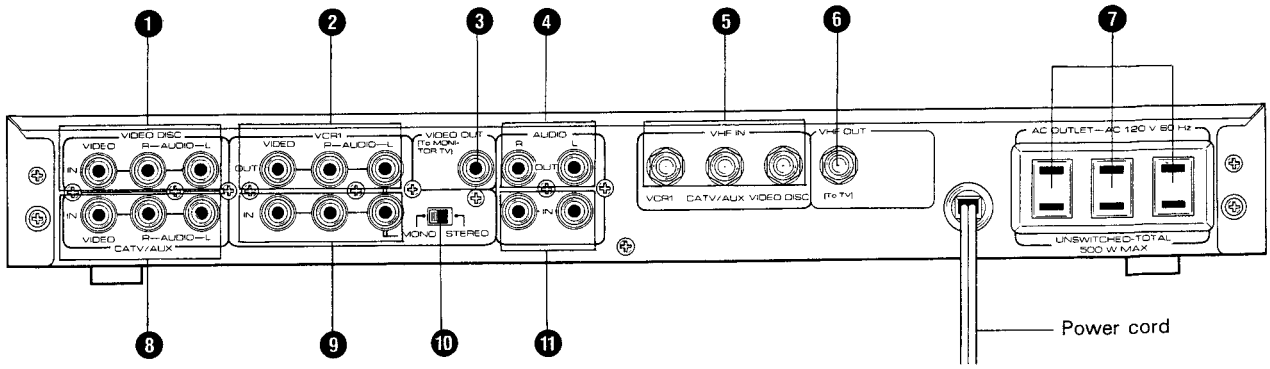


COAXIAL CABLE WITH STANDARD F-TYPE PLUG

Available commercially, or provided with other video equipment.



REAR PANEL FACILITIES



❶ VIDEO DISC IN terminals (VIDEO/AUDIO-L, R)

Use for connecting a video disc player.

❷ VCR 1 OUT terminals (VIDEO/AUDIO-L, R)

The video and audio signals from the source presently being viewed are output constantly from these terminals. Use a pin cord to connect to the input terminals of a VCR with multichannel television sound. When connecting a VCR to the front panel VCR 2 INPUT terminals, the playback is output at the VCR 1 OUT terminals, thus allowing video copying. When the audio channel is monaural, see item ❿ regarding the MONO/STEREO selector switch.

❸ VIDEO OUT terminal (To MONITOR TV)

The video signals from the video components connected to the input terminals are output here in accordance with the INPUT SELECTORS. Connect to the video input terminal of a monitor television.

❹ AUDIO OUT terminals (L, R)

Audio signals from the various video components connected to the input terminals are output here. Connect to your stereo amplifier's TAPE PLAY (INPUT) terminals. Also, when used in combination with the Pioneer Component Display (e.g. SD-25), these terminals may be connected to the audio input terminals on the rear of the display.

❺ VHF IN terminals (VCR 1, CATV/AUX, VIDEO DISC)

When you wish to use a normal television set to watch programs from a video component, connect these terminals to the RF converter output (Ch3 or Ch4) of the various components.

VCR 1:	Connect to the RF output of VCR 1.
CATV/AUX:	Connect to RF output of a CATV terminal converter or other video component.
VIDEO DISC:	Connect to RF output of video disc player.

❻ VHF OUT terminal (To TV)

When you wish to use a normal television set to watch programs from a video component, in addition to connecting the various video components' RF ouptut to the VHF input terminals, connect this terminal to the television's VHF antenna terminal.

When the unit's power is OFF, the RF output signal of the component connected to the VHF input terminal VCR 1 is input directly to the television (regardless of the INPUT SELECTOR setting). Accordingly, VCR 1 can be used even when the power to the VS-60 is turned OFF, and your television set can also be used normally.

❼ AC OUTLET — AC 120 V 60 Hz (UNSWITCHED — TOTAL 500 W MAX)

These outlets may be used to connect the power plugs of your video components. The combined consumption of the connected components should not exceed 500 W.

❽ CATV/AUX IN terminals

Use to connect a cable television converter or other video component.

❾ VCR 1 IN terminals (AUDIO/VIDEO-L, R)

Use to connect a VCR with multichannel television sound.

❿ MONO/STEREO selector switch

When connecting a VCR with monaural audio output, use a single pin cord connected to the VCR 1 AUDIO L channel, and set the audio selector switch to the MONO position. Normally, leave in the STEREO position.

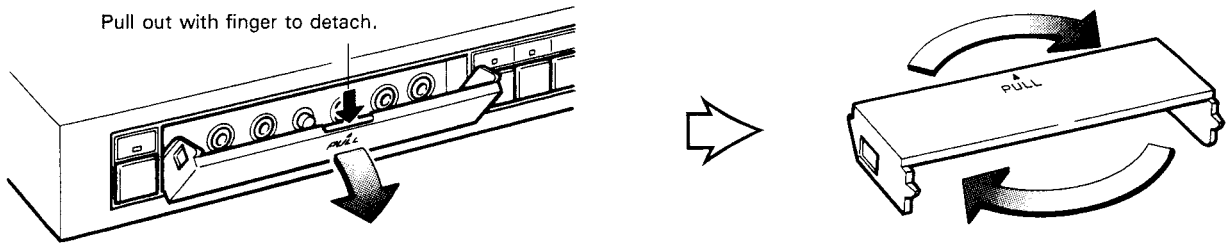
⓫ AUDIO IN terminals (L, R)

Normally, connect to the TAPE REC (OUTPUT) terminals of your stereo amplifier. The audio output of other components (e.g. compact disc player) may also be connected here.

FRONT PANEL TERMINAL COVER

TO REMOVE THE COVER:

- **The cover is designed to be detached.**



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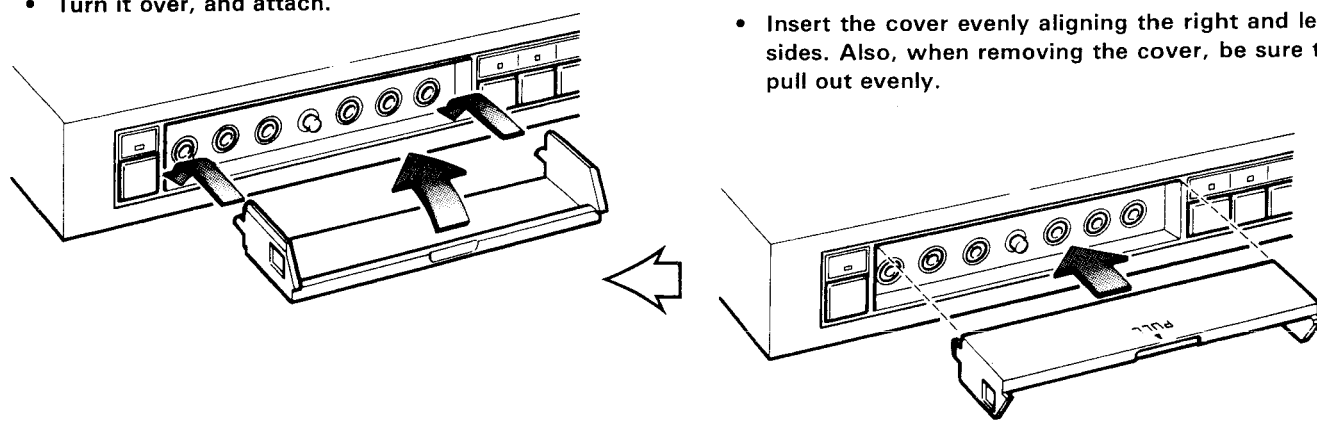
- **Pull out the cover.**
- **Turn it over, and attach.**

STORING THE COVER:

- **Insert the cover evenly aligning the right and left sides. Also, when removing the cover, be sure to pull out evenly.**



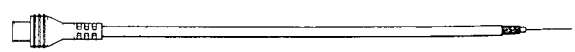
CONNECTION CORDS

VIDEO-AUDIO CORD Available commercially, or provided with other video equipment.

VIDEO CORD Available commercially, or provided with other video equipment.

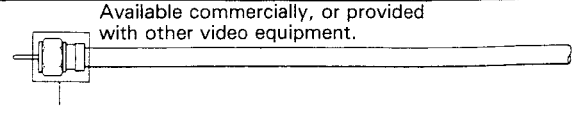
ACCESSORY AUDIO CORD

ACCESSORY COAXIAL CABLE WITH J-TYPE PLUG



COAXIAL CABLE WITH STANDARD F-TYPE PLUG

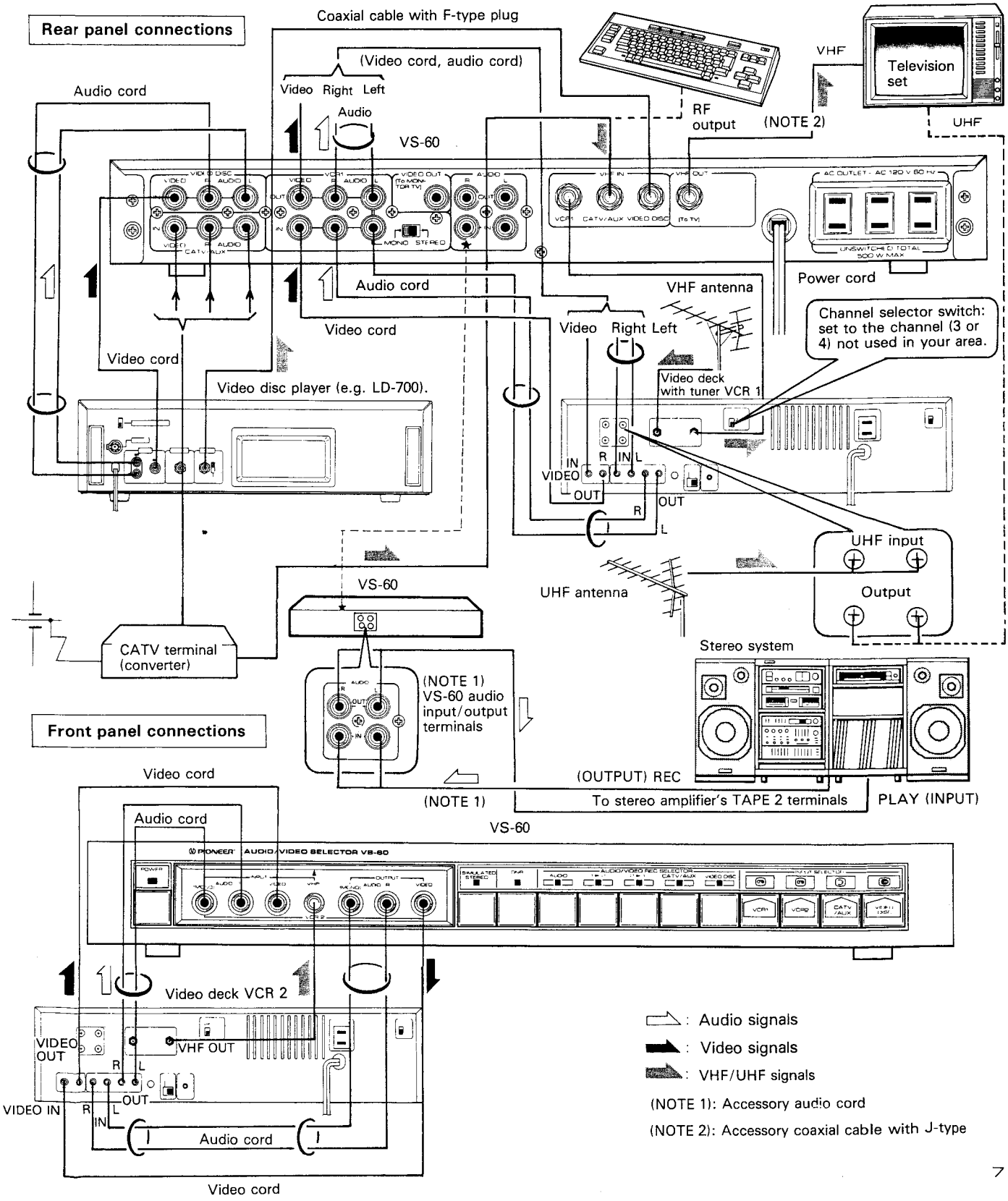
Available commercially, or provided with other video equipment.



CONNECTING A SYSTEM WHEN USING A NORMAL TELEVISION SET

<Connection example 1> VS-60 + TV + VCR 1 + VCR 2 + Video disc player + Personal computer, or CATV terminal converter .

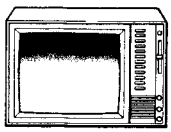
- A normal television is one not equipped with a video input terminal, having antenna inputs (VHF, UHF) only.



SELECTION OF COMPONENTS WHEN USING THE VS-60 (When using a normal television set)

The following is an explanation of how program sources are selected when using the <Connection example 1> on the preceding page. For correct operation of the various components, consult their respective Operating Instructions.
First, turn ON the power switches on the components and television set you wish to use with the VS-60.

TO WATCH A TELEVISION BROADCAST (VHF, UHF broadcast)



● Turn the VS-60's power switch OFF (see ☆ below).

Press when playing back the video disc player.

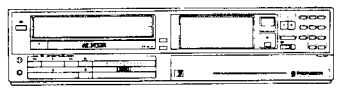
Example: LD-700

Press when playing back VCR 2.

VCR 2

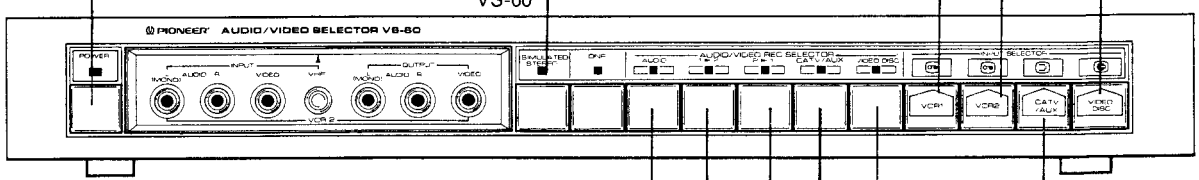
Press when playing back VCR 1.

VCR 1



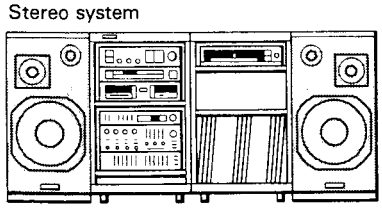
VCR audio can be played back in simulated stereo.

VS-60



Press when recording the audio from stereo system on VCR 1, 2.

Stereo system



★A Hi-Fi VCR can be used to listen to FM broadcasts.

Press to monitor CATV broadcasts or personal computer's character data.

Press to record a video disc on VCR 1, VCR 2.

Press to record a CATV broadcast or personal computer's character data on VCR 1, VCR 2.

Press to perform video copying from VCR 2 to VCR 1.

Press to perform video copying from VCR 1 to VCR 2.

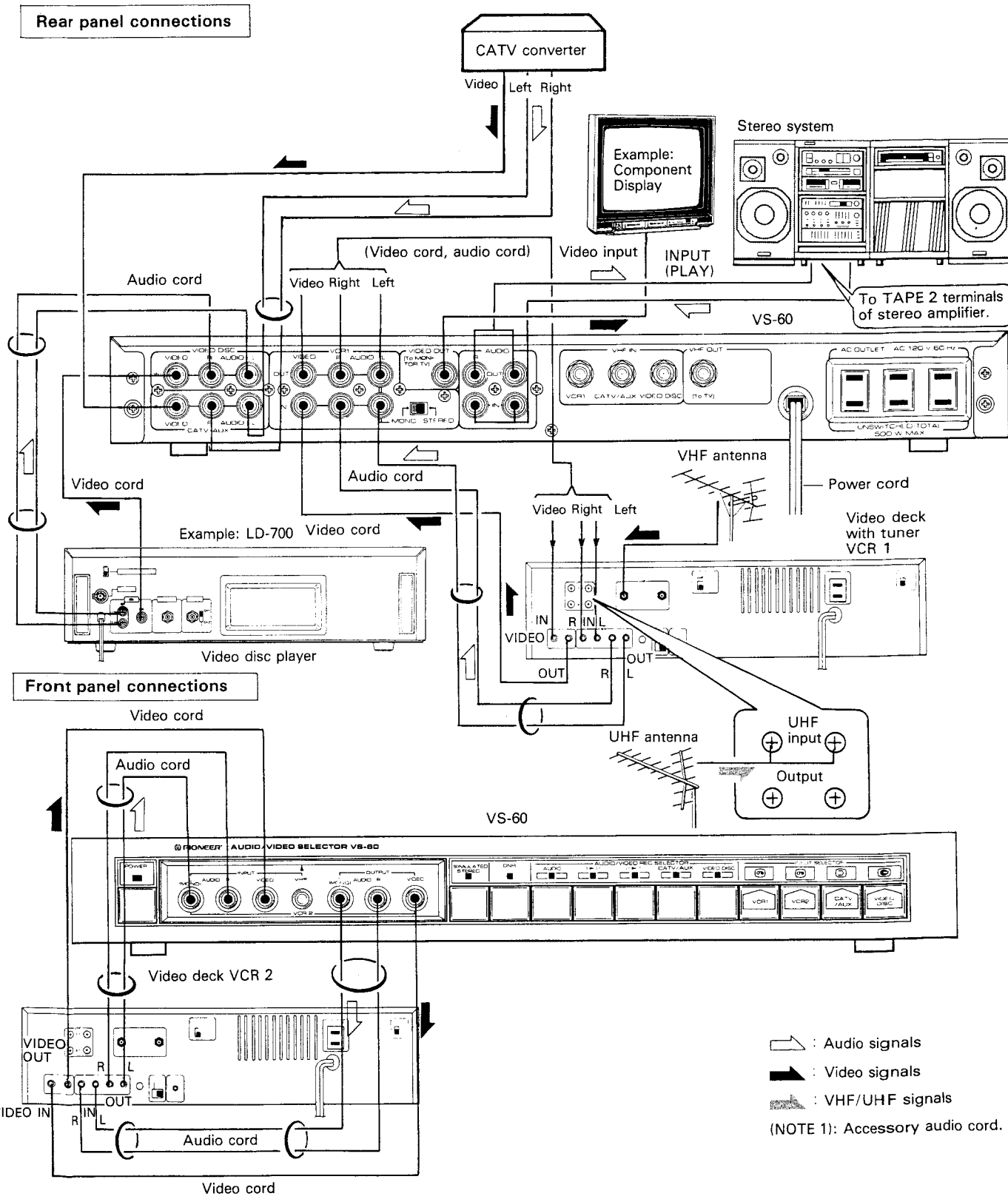
STEREO AMPLIFIER OPERATION

- Set the function selector in accordance with the input terminal connected to the VS-60. (Example, press the TAPE 2/ADPT switch).
- Adjust the volume.
  When the television's audio is not required, reduce the volume at the television.

☆When the power switch of the VS-60 is OFF, The RF output signals of the component connected to the VS-60's VHF input terminal (VIDEO 1) are input directly to the television set (regardless of the input selector chosen). Accordingly, even when the VS-60's power is OFF, you can use VCR 1 and watch normal television programming.

CONNECTING A SYSTEM WHEN USING A MONITOR TV

<Connection example 2> VS-60 + Color monitor + VCR 1 + VCR 2 + Video disc player + Cable television converter.



SELECTION OF COMPONENTS WHEN USING THE VS-60 (with a monitor TV)

The following is an explanation of how program sources are selected when using the <Connection example 2> on the preceding page. First, turn ON the power switches to the components and television set you wish to use with the VS-60.

TO WATCH A TELEVISION BROADCAST (VHF, UHF broadcast)

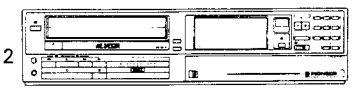
- Press the video selector VCR 1 on the VS-60.
- Turn ON the VCR 1 power switch.
- Select the TV channel using the VCR 1.
- Operate the stereo amplifier.

Press when playing back the video disc player.

Video disc player Example LD-700

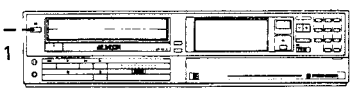
Press when playing back VCR 2.

VCR 2



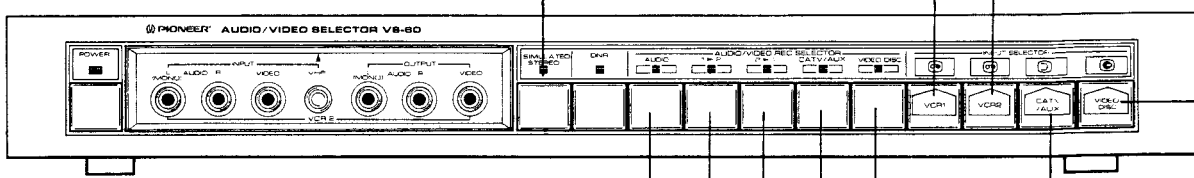
Press when playing back VCR 1.

VCR 1



The VCR's audio can be heard with simulated stereo effect.

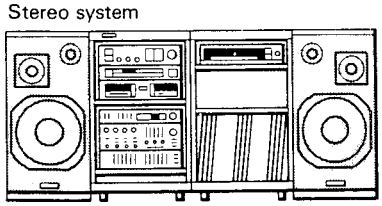
VS-60



Press when recording the audio from stereo system on VCR 1, 2.

Press to monitor CATV broadcasts or personal computer's character data.

Stereo system



★A HiFi VCR can be used to listen to FM broadcasts.

Press to record a video disc on VCR 1, VCR 2.

Press to record personal computer's character data on VCR 1, VCR 2.

Press to perform tape copying from VCR 2 to VCR 1.

Press to perform tape copying from VCR 1 to VCR 2.

STEREO AMPLIFIER OPERATION

- Set the function switch in accordance with the input terminal connected to the VS-60. (Example: Press TAPE 2/ADPT).
- Adjust the volume.

SPECIFICATIONS

		RF section (VHF input/output)	VIDEO section (video input/output)	AUDIO section (audio input/output)
Reference input level/ input impedance		1 Vp-p/75 Ω	1 Vp-p/75 Ω	150 mV/10 kΩ or more
Output level/ Optimum load impedance		1 Vp-p $^{+0}_{-0.5}$ dB/75 Ω	1 Vp-p ±0.5 dB/75 Ω	150 mV $^{+0}_{-3}$ dB/10 kΩ or more
Gain		0 dB		
Frequency response		★ 54 MHz ~ 216 MHz $^{+0}_{-2}$ dB	5 Hz ~ 10 MHz $^{+0}_{-2}$ dB	5 Hz ~ 100 kHz $^{+0}_{-2}$ dB
Crosstalk		60 dB (54 MHz ~ 216 MHz)	45 dB (3.58 MHz)	80 dB (1 kHz)
Channel separation		———	———	75 dB (1 kHz)
S/N ratio		———	55 dB (monitor output)	100 dB (1 V) (IHF-A network, short circuit)
Maximum permissible input		3 V	2 Vp-p	3 V (1 kHz)
Input selector		VCR 1, VCR 2, CATV/AUX, VIDEO DISC		
Recording selector	VCR Copy	———	VCR 1 ► 2, VCR 2 ► 1 CATV/AUX ► VCR 1, 2 VIDEO DISC ► VCR 1, 2	
	Hi-Fi Audio recording	———	———	AUDIO ► VCR 1, 2
Simulated stereo (audio output only)		———	———	ON/OFF
Dynamic noise reduction *DNR (audio output only)		———	———	ON/OFF
VCR 1, VCR 2 audio input/ output terminals		———	———	Stereo/Mono selector switch

★ 54 MHz : 2ch, 216 MHz : 13ch.

ELECTRICAL SECTION, OTHERS

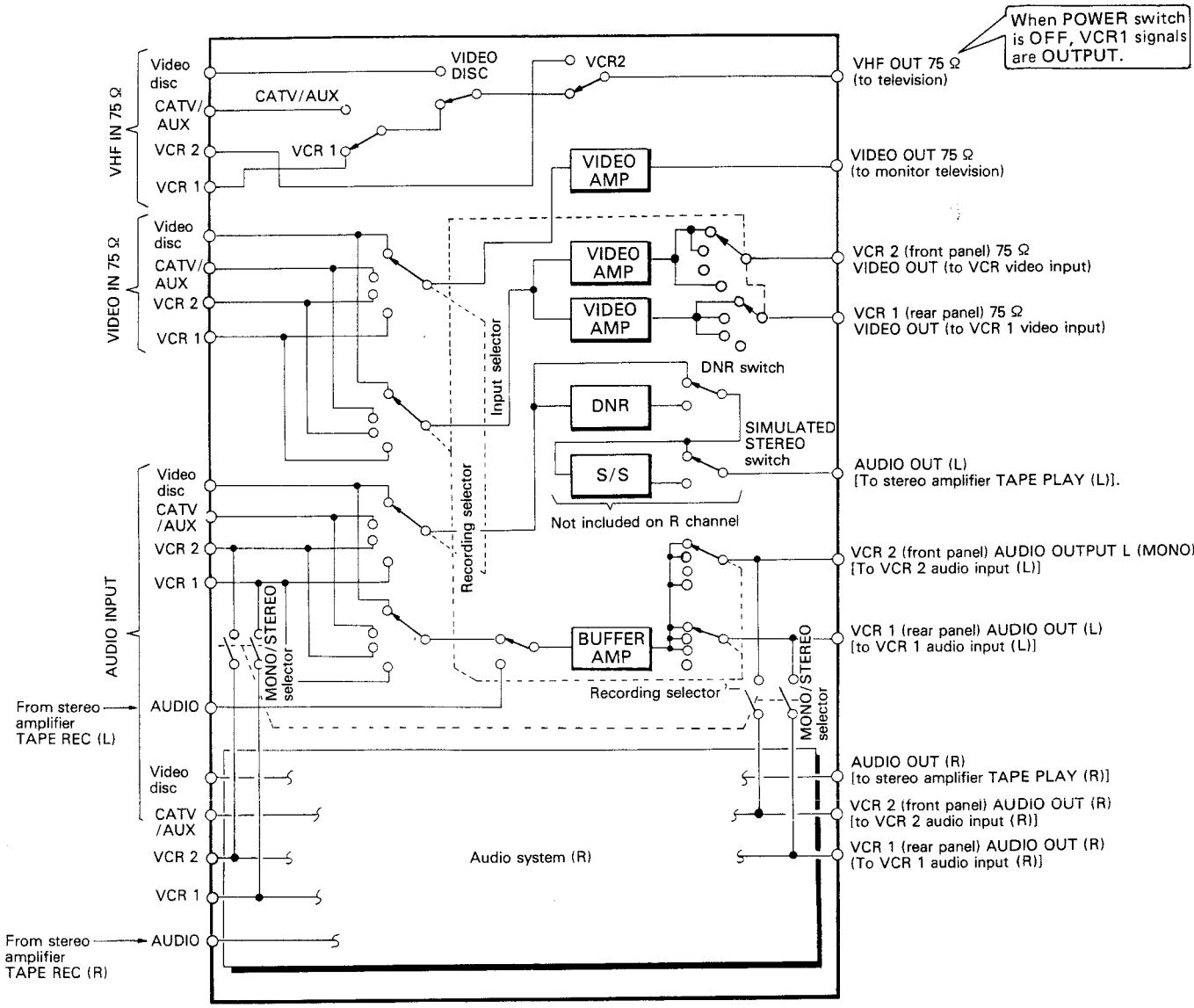
Power requirements
KU, KC models ..... AC 120 volts, 60 Hz
S/G model ..... ~AC 110/120/220/240 volts, 50/60 Hz (Switchable voltage)
Power consumption
..... 12 W
Power outlets x 3 ..... Unswitched, total 500W MAX
External dimensions ..... 420(W) x 60(H) x 215(D) mm. 16-9/16 (W) x 2-3/8 (H) x 8-1/2 (D) in.
Weight ..... 2.8 kg (6 lb 3 oz)

ACCESSORIES:

Operating Instructions 1
Warranty card 1
Audio cord (connection cord with pin plugs) 2
Coaxial cable with J-type plug 1

NOTE:
Specifications and design subject to possible modification without notice due to improvements.

BLOCK DIAGRAM


When POWER switch is OFF, VCR1 signals are OUTPUT.
VHF IN 75 Ω
VIDEO IN 75 Ω
AUDIO INPUT
Video disc
CATV/AUX
VCR 2
VCR 1
VIDEO DISC
VCR2
CATV/AUX
VCR 1
VHF OUT 75 Ω (to television)
VIDEO AMP
VIDEO OUT 75 Ω (to monitor television)
VCR 2 (front panel) 75 Ω VIDEO OUT (to VCR video input)
VCR 1 (rear panel) 75 Ω VIDEO OUT (to VCR 1 video input)
Input selector
Recording selector
DNR switch
DNR
SIMULATED STEREO switch
S/S
Not included on R channel
AUDIO OUT (L) [To stereo amplifier TAPE PLAY (L)].
VCR 2 (front panel) AUDIO OUTPUT L (MONO) [To VCR 2 audio input (L)]
VCR 1 (rear panel) AUDIO OUT (L) [to VCR 1 audio input (L)]
BUFFER AMP
MONO/STEREO selector
From stereo amplifier TAPE REC (L)
AUDIO
From stereo amplifier TAPE REC (R)
AUDIO OUT (R) [to stereo amplifier TAPE PLAY (R)]
VCR 2 (front panel) AUDIO OUT (R) [to VCR 2 audio input (R)]
VCR 1 (rear panel) AUDIO OUT (R) [To VCR 1 audio input (R)]
Audio system (R)

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